

a programmable element located on the integrated circuit, the programmable element being coupled to a redundant circuit used to repair the integrated circuit; and

A¹
Contd. a source located on the integrated circuit and comprising a flyback pump, the source adapted to be operatively coupled to the programmable element and to develop a programming signal sufficient to program the programmable element to activate the redundant circuit.

~~8/8~~ (Once amended) The integrated circuit, as set forth in claim 18, wherein the flyback pump comprises:

an inductance;

A² a control circuit coupled to the inductance to control energizing the inductance; and

an output circuit coupled to the inductance to deliver the programming signal from the inductance to the programmable element.

~~34/35~~ (Once amended) A system comprising:

A³ a processor;

a memory device operably coupled to the processor, the memory device comprising:

A³
cont'd

a programmable element located on the memory device, the programmable element being coupled to a redundant row or column used to repair the memory device; and a source located on the memory device and comprising a flyback pump, the source adapted to develop and deliver a programming signal sufficient to program the programmable element to activate the redundant row or column in response to the processor indicating that a memory location of the memory device is non-functional.

A⁴

39. (Once amended) The system, as set forth in claim ~~38~~³⁴, wherein the memory device comprises a plurality of programmable elements, each of the plurality of programmable elements being coupled to a respective redundant row or column.

~~35~~³⁴. (Once amended) The system, as set forth in claim ~~34~~³¹, wherein the flyback pump comprises:

an inductance;

A⁵

a control circuit coupled to the inductance to control energizing the inductance; and

an output circuit coupled to the inductance to deliver the programming signal from the inductance to the programmable element.

~~51~~ 53.

(Once amended) An integrated circuit testing apparatus comprising:

an integrated circuit;

a testing device configured to couple to the integrated circuit and to functionally test at least one target circuit of the integrated circuit, wherein the integrated circuit comprises:

A⁶ a programmable element located on the integrated circuit, the programmable element being coupled to redundant circuitry used to repair the integrated circuit; and

a source located on the integrated circuit and comprising a flyback pump, the source adapted to be operatively coupled to the programmable element and to develop a programming signal sufficient to program the programmable element to activate the redundant circuitry in response to the testing device indicating that the target circuit is at least partially non-functional

~~58~~ 61.

(Once amended) The apparatus, as set forth in claim ~~51~~ 60, wherein the flyback

pump comprises:

A⁷ an inductance;

a control circuit coupled to the inductance to control energizing the inductance; and

A7
cont'd

an output circuit coupled to the inductance to deliver the programming signal from the inductance to the programmable element.
